

REMARKS

Claims 1 – 20 are pending in this Application. No amendments have been made.

Reconsideration and further examination is respectfully requested.

Claim Rejections – 35 USC § 103

Claims 1, 2, 4, 5, 8, 9, 11, 14, 15, 17 and 18 were rejected under 35 U.S.C. 103(a) as being anticipated by the Cisco white paper “COPS for RSVP” and Gai et al. (US Patent 6,167,445).

This rejection is respectfully traversed.

The Applicant’s exemplary Claim 1 sets forth:

“A method of a computer network in establishing communication between a first network device and a second network device, the network including a policy device that controls policy data relating to the communication, the method comprising:

storing policy data in a storage device accessible by a third network device,  
the policy data being:

- (i) provided by the policy device in response to a communication request message from the first network device to the second network device, and
- (ii) specifically related to communication between the first network device and the second network device;

receiving with the third network device a confirmation message sent by the second network device in response to the communication request message, the confirmation message indicating that the second network device is prepared to have communications with the first network device; and

forwarding from the third network device to the first network device the stored policy data with the confirmation message.”

The Applicant thus provides an efficient and scalable method of applying policies in a manner that offloads the policy device. The Applicant’s claimed invention applies to

communications between a first and second network device. A policy device provides policy data to a third network device in response to a communication request message from the first network device. This policy data is stored in the third network device. Then, in response to receipt of a confirmation message from the second network device, the third device forwards the stored policy data and the confirmation message to the first network device.

According to one implementation of the Applicant's invention, the policy device may be a COPS server. The third network device may be a router. The first and second network devices may be access devices. In response to an RSVP request message from the first network device, the router stores policy data provided by the COPS server. Then, in response to an RSVP reservation message from the second network device, the router sends the reservation message and the stored policy data to the first network device. Note the router does not need to access the policy device in response to the RSVP reservation message.

The COPS for RSVP paper, in contrast, describes a typical prior art COPS implementation wherein all RSVP messages are forwarded by the router to the COPS server, and then from the COPS server back to the router. For example, RSVP request messages are forwarded to the COPS server for application of policies. RSVP reservation messages are also forwarded to the COPS server for application of policies. (See "How COPS for RSVP works", bullet 3: RSVP signaling messages are processed by the COPS server. RSVP signaling messages include requests and reservations (confirmations). See also Figure 2 and bullet (e), both request and reservation messages are processed by the COPS server.) This is because the policies are stored at the COPS server, not at the router. The Applicant's invention, on the other hand,

causes the policy data to be stored at the router (or in storage accessible by the router) in response to a message from the first network device, so that the router need not access the COPS server twice. The router can thus send a reservation message and the stored policy data directly to a network device without accessing the COPS server.

The COPS for RSVP paper therefore fails to teach or suggest the Applicant's claimed invention including the steps of "storing policy data in a storage device accessible by a third network device, the policy data being: (i) provided by the policy device in response to a communication request message from the first network device to the second network device, and (ii) specifically related to communication between the first network device and the second network device; and "forwarding from the third network device to the first network device the stored policy data with the confirmation message".

Gai discloses a method of using a central policy server (322) for configuring intermediate devices (e.g. router 318). Gai discloses only that configuration information can be sent from a policy server to a router and stored there. In Gai, the central policy server communicates only with the router(s). The information transferred between the policy server and the routers of Gai is related to router traffic management and thus is transferred no further. The central policy server of Gai cannot provide information to a router based upon a communication request message from a first network device to a second network device. Nor does Gai provide any suggested means of forwarding such information from the router to a first network device. Thus Gai presents the same deficiencies as the COPS for RSVP paper. Particularly, both the COPS for RSVP paper and Gai, taken either alone or in combination, fail to teach or suggest the

Applicant's claimed invention including the steps of "storing policy data in a storage device accessible by a third network device, the policy data being: (i) provided by the policy device in response to a communication request message from the first network device to the second network device, and (ii) specifically related to communication between the first network device and the second network device; and "forwarding from the third network device to the first network device the stored policy data with the confirmation message", the Applicant respectfully asserts that claim 1 and its dependent claims 2, 4, and 5 are in condition for allowance.

The Applicant's independent claims 8 and 14 include limitations similar to those of claim 1. The Applicant therefore respectfully asserts that claims 8, 9, 11, 15, 17, and 18 are in condition for allowance for the same reasons as set forth with regard to claim 1.

Claims 3, 10, and 16 were rejected under 35 U.S.C. 103(a) as being unpatentable in view of the combination of the Cisco white paper "COPS for RSVP" and Gai and "Internet Group Management Protocol, Version 2" ("IGMP"). This rejection is respectfully traversed. Claims 3, 10, and 16 depend from claims 1, 8, and 14 respectively. IGMP adds nothing further to COPS for RSVP and/or Gai to teach or suggest the invention as set forth in the independent claims. The Applicant therefore respectfully asserts that claims 3, 10, and 16 are in condition for allowance.

Claims 6, 12, and 19 were rejected under 35 U.S.C. 103(a) as being unpatentable in view of the combination of the Cisco white paper "COPS for RSVP" and Gai and "An Architecture for Differentiated Services" ("DSCP"). This rejection is respectfully traversed. Claims 6, 12, and 19 depend from claims 1, 8, and 14 respectively. DSCP adds nothing further to COPS for

RSVP and/or Gai to teach or suggest the invention as set forth in the independent claims. The Applicant therefore respectfully asserts that claims 6, 12, and 19 are in condition for allowance.

Claims 7, 13, and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable in view of the combination of the Cisco white paper "COPS for RSVP" and Gai and "The Standards Watch: 802.1p signaling marking" (802.1p"). This rejection is respectfully traversed. Claims 7, 13, and 20 depend from claims 1, 8, and 14 respectively. 802.1p adds nothing further to COPS for RSVP and/or Gai to teach or suggest the invention as set forth in the independent claims. The Applicant therefore respectfully asserts that claims 7, 13, and 20 are in condition for allowance.

The Applicant has made a diligent effort to place the claims in condition for allowance. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone the undersigned, Applicants' Attorney at 978-264-6664 so that such issues may be resolved as expeditiously as possible.

For these reasons, and in view of the above amendments, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,



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Date

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